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AUTOMOTIVE INDUSTRIES

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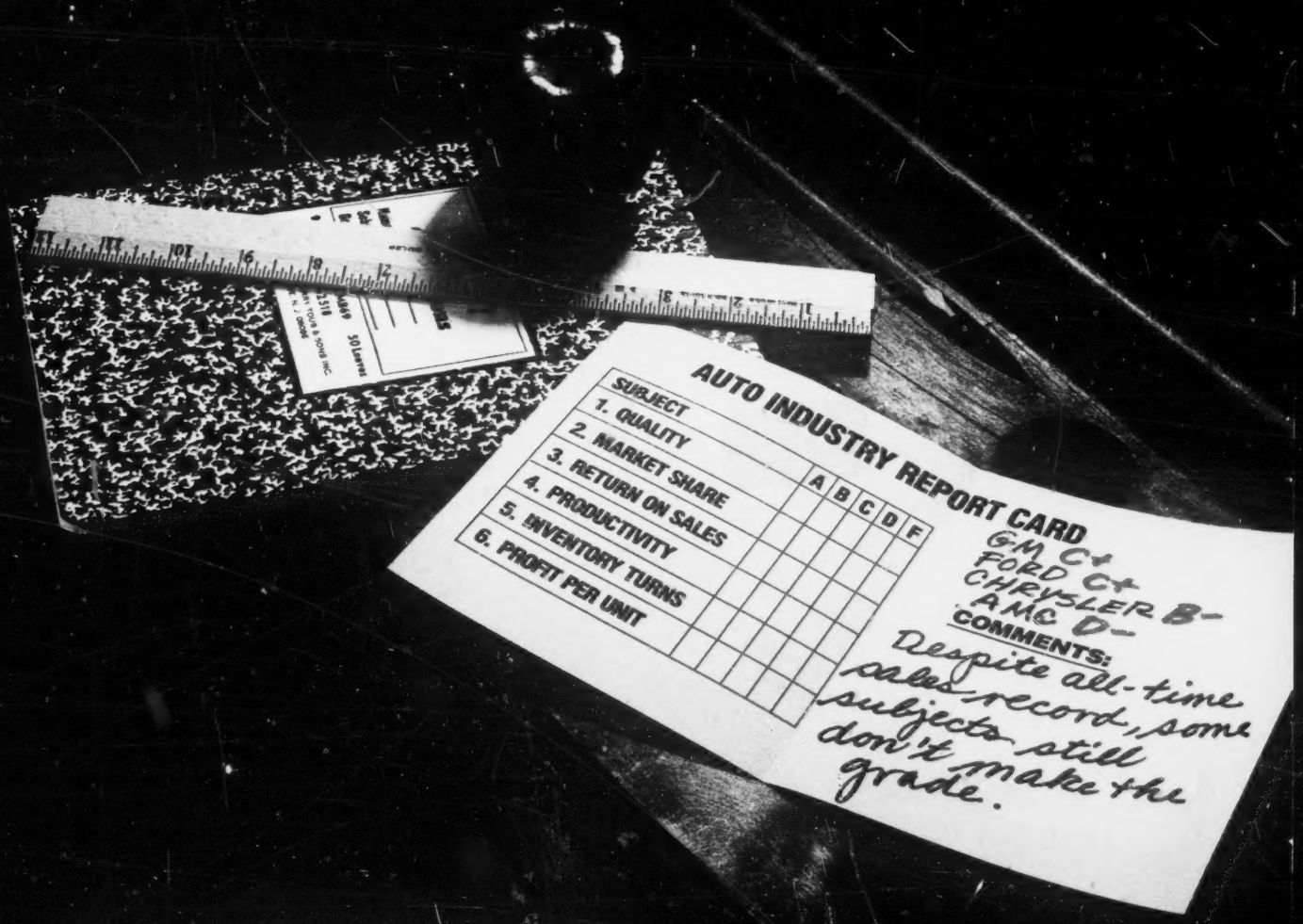


APRIL 1986 VOLUME 166, No. 4

A CHILTON'S AUTOMOTIVE INDUSTRIES SINCE 1896

SUBJECT	A	B	C	D	F
1. QUALITY					
2. MARKET SHARE					
3. RETURN ON SALES					
4. PRODUCTIVITY					
5. INVENTORY TURNS					
6. PROFIT PER UNIT					

Who's scoring how high in which area? Find out on page 38.

COVER STORY

38 AUTO INDUSTRY REPORT CARD: PROBLEMS IN PROFIT-LAND
Class distinctions among the Big Four become even more pronounced as Chrysler heads for the top and AMC scraps bottom.

FEATURES

44 ACURA: A NEW DAWN FOR AMERICAN HONDA
The 'We Make It Simple' folks step up to bat in autodom's luxury/sport ballgame with a new division—and two new, yet familiar automobiles.

49 HYDRA-MATIC UPSHIFTS FOR QUALITY
GM gets tough on gearbox quality in an effort to halt its automatic transmission builder's tranny troubles.

55 ZAP! ELECTRONIC STEERING!
TRW wins the race to front the first electronic power steering system.

58 HUGHES ELECTRONICS: CAPSTONE FOR GM'S NEW EMPIRE?
We talk with the president of Hughes Electronics about potential technology transfers, and how GM could help solve quality problems.

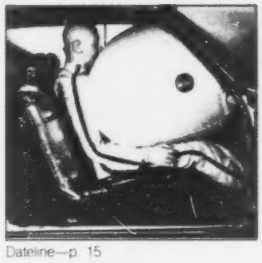
61 CHEAP GAS! WEAK DOLLARS! OH, WHAT A FEELING!
The one-two punch of lower gas prices and weak dollars could mean blue skies for domestic automakers in their battle with the Japanese.

43 TRUCK & OFF-HIGHWAY INDUSTRIES*
* Not found in all issues.

Acura—p. 44

Hydra-Matic—p. 49

Hughes—p. 58



Dateline—p. 15

NEWS

Newsline: The Bosch-Intel Network 5

Dateline: Airbags on the Way 15

DEPARTMENTS

Editorial: Straight from the Top 8

At Large: Time to Counterattack 12

Managing for Quality: What is Just-In-Time? 14

Callahan's Auto Report: Chicago Fire from Auto Execs 34

AIAG EDI to Save Billions of Dollars 66

Materials LTV Reviews EG Steel Plans 72

Automation Low Volume Forming 73

Computer Technology ARG's Integrated Strategy 78

Letters Spyflash! 84

AUTOMOTIVE INDUSTRIES (ISSN 0273-656x) magazine is published monthly by Chilton Co., Chilton Way, Radnor, PA 19089. Chilton Company is a division of American Broadcasting Companies Inc., New York, NY. Subscription rates and single copy prices on request. Second Class Postage paid at Wayne, PA 19087 and additional mailing offfices. POSTMASTER: Send address changes to AUTOMOTIVE INDUSTRIES, P.O. Box 1441, Riverton, NJ 08077. © Chilton Company, 1985. Permission to photocopy for internal use or the internal use of specific clients is granted by Chilton Company for libraries and other users registered with the Copyright Clearance Center (CCC), provided that the base fee of $1.00 per copy of the article, plus 25¢ per page is paid directly to the CCC, 21 Congress St., Salem, MA 01970. Special requests should be addressed to The Editor. (0273-656x/85 $1.00 + 25¢)

ONE OF THE ABC PUBLISHING COMPANIES

Volvo White Beats GMC In Class 8 Market Share

by Douglas Williams

"We like to say 1985 was the year we passed General Motors," says Thage Berggren, president of Volvo White Truck Corp. When Volvo bought the assets of White in 1981, the truck company had just 4.9% of the US Class 8 market. In 1985, Volvo White took 8.8% of the US market, edging just ahead of GMC and just behind Kenworth and Peterbilt for the year. In that same four-year period, GMC slipped from 13.2% share of market to 8.7%.

Berggren said the US subsidiary of the Swedish manufacturer is proud that it's the only Class 8 (over 33,000 lb GVW; *15,000 kg*) manufacturer in the US that consistently increased market share over the past four years.

In detail, Volvo White's performance looks even better. "During the second half of 1985, Volvo White retail delivered trucks at a rate that was quite opposite the declining industry," said Berggren. "We averaged 10% Class 8 market share for the months July through December.

		FORECAST 1985	1984	1983	1982
1	DAIMLER GROUP	57,000	63,000	66,000	73,000
	DAIMLER	36,000	43,000	54,000	66,000
	FL	21,000	20,000	12,000	7,000
2	RENAULT GROUP	46,000	48,000	34,000	41,000
	RENAULT	17,000	19,000	20,000	24,000
	MACK	29,000	29,000	14,000	17,000
4	INTERN HARVESTER	32,000	36,000	22,000	22,000
5	GM GROUP	29,000	34,000	23,000	21,000
	GM	15,000	19,000	9,000	9,000
	BEDFORD	2,000	2,000	2,000	3,000
	ISUZU	12,000	13,000	12,000	9,000
6	PACCAR (KENWORTH, PETERBILT, FODEN)	25,000	31,000	18,000	14,000
7	SCANIA	23,000	22,000	17,000	18,000
	FORD	23,000	22,000	12,000	14,000
9	HINO	19,000	19,000	11,000	12,000
10	IVECO	18,000	18,000	21,000	24,000

*ESTIMATED FIGURES

US Sales Best

"Our people at New River Valley, VA are pushing out 38 trucks a day, today," he continued. "That's the highest single shift production rate since the plant came into existence." The previous high output for one year was 8100 big trucks in 1978; in 1985 output was 8700, Berggren says.

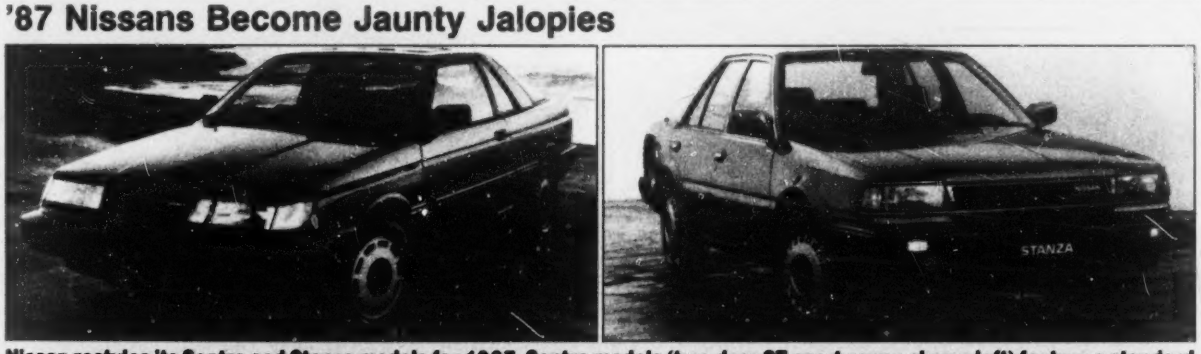
By mid-1985, Volvo White's cumulative profit equalled the monies that were invested in the company since buying White, he adds. The US is "Volvo's largest and most successful truck market," he says. It accounts for 32% of all Volvo truck sales around the world (see chart for Class 8 world rankings).

Larry Oliphant, sales VP, said the company has sold "a little over 500 Volvo N12 trucks [typically straight-jobs with dual rear tandem drive axles] into the construction business."

The company is just introducing a new gear-driven flywheel power take-off for the N12 trucks. It's aimed specifically at concrete mixers, refuse trucks and the like. Mounted between the engine and transmission, with the hydraulic pump behind the truck cab, the new PTO unit has a separate clutch controlled by a switch on the instrument panel.

Volvo now has some 900 of its 12-L diesel-powered trucks in the US, and claims fuel economy to be in excess of 10% better than the competition. AT

'87 Nissans Become Jaunty Jalopies



Nissan restyles its Sentra and Stanza models for 1987. Sentra models (two-door SE sport coupe shown left) feature a standard fuel-injected (TBI) 1.6-L four. Also in the '87 Sentra family are a new three-door hatchback, two-and four-door notchbacks and a five-door wagon. Nissan is shooting for 12% of the US small sedan market with the new Sentra range, or about 220,000 units/yr. The Stanza (right, notchback GXE) for '87 shares the Maxima's suspension and longer platform but not it's 3.0-L V6. Power instead comes from the 97 hp 2.0-L four found in last year's model.

PROBLEMS IN PROFIT LAND

Despite record '85 sales, quality and performance gains remain marginal.

by John McElroy

Company: General Motors

Category	1973	1978	1983	1984	1985	Grade	Comments
Quality	—	—	82.6	91.2	92.6	B	Not bad and getting better.
Profit Per Unit	$481	$667	$639	$666	$446	C-	Oh-Oh. Back to where you were 12 years ago.
US Market Share	51.5%	47.3%	41.5%	39.1%	39.7%	C	Thank the Lord for trucks!
Return on Sales	6.7%	5.5%	5.0%	5.4%	4.1%	C-	Tsk. Tsk. Sure puts that $4 billion profit in perspective.
Productivity	11.4	12.0	11.7	11.5	12.7	B	Keep this up and you'll catch the others.
Inventory Turns	5.4	6.7	11.0	10.3	11.9	B	Looks like this is turning around.
					Overall Grade	C+	

By most appearances, 1985 was a banner year for the American auto industry. Though the domestic automakers' didn't make as much money as they did in 1984, combined profits at GM, Ford and Chrysler still came to a staggering $8 billion. And total industry sales set an all time record.

But if we use *AI*'s Annual Report Card to peek behind these headlines, it becomes apparent that problems still persist. Strikes, low cost financing, heavy overtime schedules and import competition all took their toll. Nonetheless, compared to last year, the industry has made marginal improvements.

To determine each company's grade, we didn't just look at who got the highest numbers in each category. Instead, we looked at the trends in six categories. Each company was marked according to its own performance, not how it stacked up against its competitors. So even if a company scored higher than all the others in a given category, it didn't automatically get a better grade. However, if you don't agree with the grades we gave, the numbers are there for you to grade them yourself.

Our quality measure is based on the J.D. Power Customer Satisfaction Index, which rates cars after they've been in customers' hands for a year. And it was a shock to learn that Ford's and Chrysler's quality ratings fell into a steep power dive. Why the downfall? Probably for several reasons, but mostly because both companies have been running so much overtime for the last two years. They're simply wearing out their people and equipment.

Then too, part of the old "get it out the door" manufacturing philosophy seems to have crept back as all companies struggled to gain or maintain market share.

Though it still has the best overall

Company: Ford

Category	1973	1978	1983	1984	1985	Grade	Comments
Quality	—	—	110.5	113.6	95.3	D⁻	OOOF!
Profit Per Unit	$273	$424	$433	$755	$580	A⁻	Some slipping, but still a good number.
US Market Share	29.8%	26.5%	21.6%	22.7%	21.3%	B⁻	Losing here is something you can't a Ford.
Return on Sales	3.9%	3.7%	4.3%	5.5%	4.7%	B⁻	Ahem.
Productivity	13.7	13.7	14.3	15.9	16.9	C	Good! Continuous improvement.
Inventory Turns	5.3	6.5	12.2	14.2	16.6	A	Outstanding.
					Overall Grade	B⁻	

rating, Ford is going to have to scrap its "Best Built American Cars" advertising campaign and relinquish that honor to General Motors if present trends continue. That's why Ford got a 'D' for quality.

For its part, GM moderately improved its quality. But we still have to wonder if this is a result of more inspection and repair work rather than an indication of doing it right the first time. What is GM's first time quality?

American Motors has shown a definite improvement, but it still hasn't met the quality rating it got three years ago. Therefore the big improvement only earned it a 'D+'.

Profit Per Unit

This category shows how much profit each automaker made on each vehicle it sold. It also shows that each automaker earned substantially less than it did the year before. This was primarily due to low rate financing campaigns. And GM and Chrysler were hit by strikes that also reduced their profits. Nonetheless, Chrysler's performance is nothing short of astounding. It is making nearly twice

(Continued)

How They Were Graded

To determine who got what grade, *AI*'s editorial staff selected six categories that would measure the overall efficiency of a company. Then we dug through old annual reports to develop trend lines in each of those categories for each company.

Each company was then graded according to these trend lines. We weren't looking for who got the highest numbers in any category. Instead, we looked to see if a company was improving compared to its prior performances.

If a company had an outstanding improvement, it was given an A. As long as it showed overall improvement, it was given a B. If there was no improvement, it was given a C. If it was falling behind what it had achieved before, it was given a D. If it was failing, it was given an F.

As always, everyone has a different idea of who should get what grade. So, to help eliminate any bias, *AI*'s editorial staff each submitted their own grades and we averaged them to get what you see here.

REPORT CARD

Company: Chrysler

Category	1973	1978	1983	1984	1985	Grade	Comments
Quality	—	—	91.5	90.3	77.3	D	What happened?!
Profit Per Unit	$131	($129)	$469	$1210	$1080	C+	Very, very good. Despite a strike and low cost financing.
US Market Share	15.6%	11.2%	10.2%	11.0%	11.1%	C	Solid performance in the face of strong competition.
Return on Sales	2.1%	(1.5%)	5.3%	12.4%	7.6%	C	Strong return despite a full tax load.
Productivity	13.0	13.0	16.4	18.5	17.0	B	Hmmm... Looks like the strike took its toll here, too.
Inventory Turns	5.6	6.3	12.8	14.7	19.0	A	Fantastic! The JIT efforts are really paying off.
					Overall Grade	C+	

the profit that Ford does on each vehicle it sells, and has a $600 advantage over GM.

Is Chrysler really that much better run than GM or Ford? No, not really. The great bulk of that advantage can be attributed to their outsourcing levels. Chrysler buys 70% of the parts and components it uses to make its cars and trucks. GM, by comparison, only outsources 30%. In other words, GM builds 70% of a vehicle with $24 an hour UAW labor. Chrysler builds 70% of a vehicle with labor that costs $17 an hour, or even less than that.

Even so, Chrysler's profit per unit trend line still outperformed all others and that's certainly a sign of good management.

US Market Share

The domestic automakers knew they would have a tough selling job when the Japanese increased their import quota by 24% a year ago. Even so, the domestics were pretty much able to hold their own because the total market grew.

But what price glory? The low rate finance campaigns the domestics resorted to last summer were able to move a lot of cars, but they turned into give-away programs. For example, even though GM set an all-time sales record in the third quarter, the company still lost money.

The truly bright spot was in trucks, which broke the sales record that was set back in 1978. Indeed, it was truck sales that pulled the industry to its all-time record in 1985. Car sales turned in their third best showing. But this is misleading. If imported cars are subtracted from the total, the domestic automakers didn't even sell the same amount of cars that they did twenty years ago.

Thankfully, all the domestic producers sold near-record amounts of trucks. It was their second best showing in history. And AMC's Jeep operations saved the company from total oblivion. Yet, there is a dark cloud on the horizon. Import truck sales hit 786,000 units (the equivalent of more than three assembly plants' output) despite a 25% import tax!

Return On Sales

This category measures what percent of total dollar sales each company can keep for the bottom line. Here too, 1985's results were below what they achieved the year before. But Ford and Chrysler didn't carry a full tax load in 1984, so their returns were expected to drop once they got socked by Uncle Sam.

Nontheless, there were other fac-

Company: American Motors

Category	1973	1978	1983	1984	1985	Grade	Comments
Quality	—	—	76.0	51.5	65.0	D+	A big improvement, but still a long way to go.
Profit Per Unit	$147	$101	($674)	$35	($378)	F	Gulp!
US Market Share	3.5%	2.3%	2.7%	2.8%	1.9%	F	Double Gulp!
Return on Sales	4.3%	1.4%	(4.5%)	0.36%	(3.1%)	F	Triple Gulp!
Productivity	18.2	17.1	16.8	18.1	14.7	D	Kenosha closings kept this number down.
Inventory Turns	7.2	6.4	12.0	15.3	15.5	C+	Well, it's an improvement.
					Overall Grade	D-	

tors worth examining that caused profits to slip. As already noted, low cost financing programs cut heavily into profits, and GM and Chrysler were hit by short strikes. Then too, GM's highly touted reorganization has not yet favorably impacted the bottom line. GM was also saddled by heavy losses ($327 million) in Europe and the high cost of launching new products. Ford, on the other hand, elected to concentrate on profits instead of market share in Europe and saw its profits nearly double.

Productivity

What this category measures is how many employees a company needed to build all the vehicles it produced last year. It measures efficiency on a world-wide basis, but eliminates any subsidiaries that have nothing to do with automotive production such as GM's Hughes Electronics, Ford Aerospace or Chrysler First (the financial group).

Ford, GM and AMC all showed productivity improvements, and Chrysler's drop is presumably related to the production it lost to two separate strikes it suffered in the US and Canada. Manufacturing people usually look for an improvement in quality when productivity increases. But the quality ratings show that the increase in productivity came more from all the overtime the automakers ran last year, rather than from better manufacturing methods. Indeed, the decrease in profits also suggests that the productivity increase was due to overtime, because it certainly had no positive effect on the bottom line.

Inventory Turns

This section measures how well the automakers are implementing just-in-time (JIT) production. The more turns they have, the more efficiently their operations are running. This is the only category where all the domestic manufacturers were able to show an improvement.

Additionally, this is probably the one area where all the overtime they ran actually had a positive impact. With many of their plants humming along at full speed, there was no need to stockpile huge banks of parts and components.

But it's probably unfair to attribute the inventory improvements solely to overtime.

All the domestic automakers, and even their suppliers, have been working diligently to reduce the amount of inventory they carry. And as the report card shows, that effort is paying off. AI

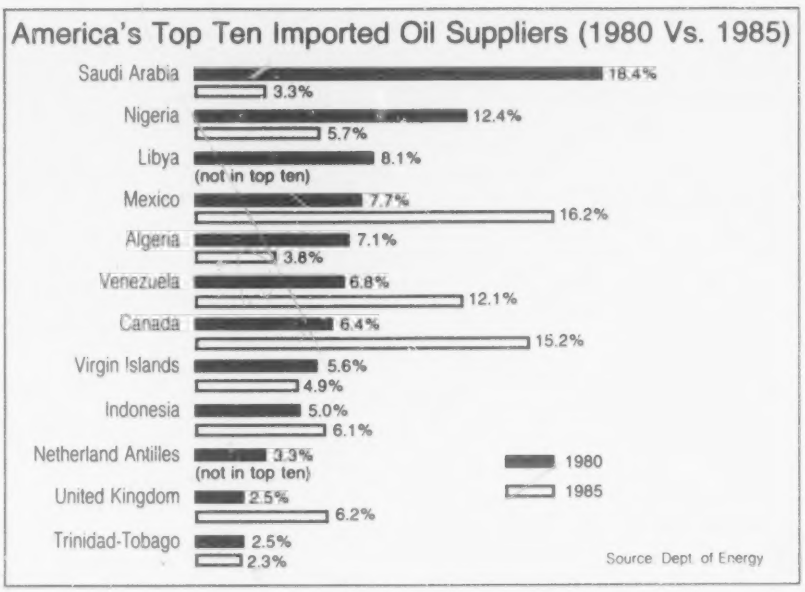
CHEAP GAS! WEAK DOLLARS! OH, WHAT A FEELING!

The one-two punch of lower gas prices and weak dollars could mean blue skies for domestic automakers in their battle with the Japanese.

by Lance A. Ealey

Nineteen eighty-six just wasn't supposed to work out this way. Automotive product planners at the beginning of the decade were looking for gas prices to *start* at over $2 a gallon, and the oracles at major US automakers and suppliers were beginning to think big in terms of moving sourcing and even production off-shore to gain an edge on the locomotive-like strength of the dollar.

Instead, we get unleaded gasoline selling for under a buck a gallon and possibly headed for $8 a barrel, and greenbacks hobbling along at 180 yen, down from 250 yen in 1982. While both developments are apparently unrelated, they could mean big medicine in terms of getting domestic car producers into world-class fighting trim.



What Cheap Gas Means

For GM and Ford, cheap gas is really something of a Trojan Horse. The pleasant part is that people are clamoring for bigger, V8-powered cars; a market segment from which both automakers draw their biggest profits. The part involving the Greeks is that neither company will meet Corporate Average Fuel Economy (CAFE) standards for 1987-88 unless they're reduced from 27.5 mpg to 26 mpg. (See box)

Chrysler, on the other hand, can meet the standards, but doesn't have enough big car firepower to take full advantage of the current sales boom. And you can't ignore the recent push upscale by the Japanese, which could significantly eat into big car sales.

Still, cheap gas should do big things for car sales. "It's estimated that there may be as much as $80 billion that will not be spent on oil imports," says Tom O'Grady of Integrated Automotive Resources, Inc. "That $80 billion would be 'respent' in a sense on other products in the United States."

A recent University of Michigan forecast indicates that if oil prices remain near $16 a barrel, US auto sales could climb by 700,000 units this year and by 1 million units for 1987, for total car sales of 11.2 million and 10.8 million for 1986-87 respectively.

That 700,000 unit figure "sounds a bit generous," says David C. Munro, general director of macro and international economics for General Motors. "We've raised our publicized comment on North American Vehicles, between the beginning and the middle of the model year, by about a third of that 700,000."

And Chrysler, in a marked non-Rambo-ish mood, raised its car industry forecast by a scant 100,000 units. "Maybe 700,000 is a unit expression of the total amount of money that will be spent on transportation, but we feel that a considerable amount of it will go for a richer segmentation mix, and some of it will go for driving more miles," says Chrysler corporate economist Donald P. Hilty. Besides, says Hilty, "We like to see the surprises on the upside."

How long can the oil bonanza last?

"At this point, we think we're looking at two years of stable or decreasing fuel prices," says Richard Klimisch, executive director of environmental activities staff at the GM Research Center. Still, adds Brent T. Upson, general director of economic analysis for GM, it could mean relatively cheap gas for the next decade.

"We are not as dependent on the Persian Gulf area [see chart]," Upson

notes. "There's been a great deal of conservation. There's been a big expansion in production capacity for petroleum outside of OPEC. And there's been the development of very major stockpiles, particularly our so-called strategic petroleum reserves, which makes us less captive to temporary interruptions in the Persian Gulf. We think it's a sign of better times energy-wise, for the future."

Japan's Sticker Shock

Japanese automakers could be forced into raising car prices by as much as 20% in order to make up the profitability lost to the weak dollar, if the worst case senario makes it to the big screen.

Chrysler's Hilty says the Japanese had built in hedges against the rise of the yen by forwarding contracts 12 months ago based on the value of the then-weak yen. Those hedges have now been clipped, however.

"We feel that the Japanese government did alert them that the yen would be allowed to appreciate," Hilty explains, "so most of the Japanese auto companies hedged their dollar revenues. They brought currency forward so that they didn't have any effects of a stronger yen for about at least a year."

That, combined with the increased buying power of the strengthening yen in terms of raw materials, means that "in the last 12 months or so, they have made more money selling cars in the United States than they did before," notes Hilty.

Now, Hilty says, profits are going down, so Japanese car prices are going up.

"There was a round of increases in December/January that amounted to about 4%," he says. "We now see another round happening that seems to be on the order of another 5%. The yen has appreciated about 30%, so the 9% or 10% increase in prices is not a full reflection yet of the increase of the value of the yen.

"People who study the yen in detail say that between 30% and 70% of the yen's appreciation will be passed on," Hilty continues, hence the possible 20% increase in prices. "We would hope that at least half of it would be passed on in the auto industry. If between 50% and 70% is passed on, we think we would be getting close to a level playing field."

The Case For Lowering CAFE

(Fuel Costs for 15,000 mile/year, based on EPA formula.)

	Gas Price Per Gallon			
	$1.25	$1.00	85¢	75¢
Chevy Sprint	$399	$319	$271	$239
Honda Civic	$585	$468	$398	$351
Lincoln Town Car	$892	$714	$606	$535

Without playing favorites among GM and Ford, who want the CAFE lowered to 26 mpg for 1987-88, and Chrysler, who can meet the existing 27.5 mpg level, if you look at the accompanying chart, the case for lowering the CAFE, from the consumer's viewpoint at least, becomes clear. If a gallon of unleaded regular drops from $1.25 to 75¢, the cost to fuel the Town Car is less than fueling the Civic at $1.25. At 75¢ per gallon, you could drive a Sprint across the US five times for under $250.

Some Japanese automakers could actually find the playing field sloping the other way. While cautioning that "It's no more than word of mouth to my knowledge," GM's Munro says that word has it "the Japanese makers were setting their pricing decisions and product planning on a 220 benchmark. And when they were at 258 they were making a little extra than they had planned, and hitting us a little harder. And that they probably still had some decent margin down around 200, and maybe by the time you got to 180, they were barely breaking even."

In any case, says Munro, the pricing impact is apparently trickling down to the dealer level. "The Japanese have apparently been raising their wholesale prices a little more than their list prices. In other words, they have been tightening their profits, but they've also been tightening the profit belt of their dealers."

Now comes the $64,000 question: Will US automakers follow the Japanese in raising prices, or will they fend off the shareholders and maintain their present pricing structure, thus gaining in price competitiveness?

"Sanity would dictate that one does not follow," says O'Grady, "particularly with the domestics scrambling for more competitiveness between their products and the Japanese."

Adds Paul W. McCracken of the University of Michigan, "An exchange rate of 170 isn't going to produce a balance in the cost relationships between the industries in Japan and the US. Japan would still have an advantage, although less of one. With the yen down around 170, the ball is in the American industry's court to try to meet the competition." *(See Maryann Keller's column on page 12 for more on this subject—ed.)*

Additionally, the weaker dollar could change the minds of some US automakers and suppliers about sourcing outside of the United States. "There's no question it changes the exchange rate calculus in favor of the US," says GM's Munro. Adds Chrysler's Hilty, "There are some currencies that are pegged to the dollar, like the Brazilian cruzeiro and the Korean won, so it would still be beneficial to source in those countries."

Will the yen drop further? John Deaver, Ford director of economics, pegs 150-160 yen as a good exchange rate "To get our current accounts into reasonable balance." Still, he admits, whether it will drop that far is another matter entirely.

Adds Paul McCracken, "If the yen fell below 170, I'm sure you'd find the Japanese government under heavy pressure to take whatever action was needed to strengthen it." AT